



**Semi-annual report**  
***April 1 2001 – September 30 2001***

**FITCA-EMMC**

***Dr Daniel BOURZAT***

**October 01**

**Title of project: FITCA-EMMC**

**Project Number:** 7.ACP.RP.R 578

**ILRI Project Unique Id.:** EN 11 /OAU002

**Principal Investigators:** Daniel BOURZAT, Robin REID

### **Summary**

This report is covering the first six months period of the project. The endorsement of the Service Contract and the first Administrative Order was carried out the last day of March 2001. Financial statement is annexed.

The background of the project, objectives, as well as the implementation of the activities is given.

Settling the proper procedures inside and outside ILRI, coordination with SEMG and RAO, field contact, meeting with NAR's, coordination to FITCA national, attending the annual and technical meetings, supporting the design of questionnaire of the country FITCA teams as well as preparation of implementing short-term consultancies have taken the main part of the time of the co-ordinator.

A brief synthesis of the planned activities for the 6 coming months is given at the end of this document.

### **A. Progress of Work**

1. **Purpose** – The project purpose is to increase the level of information and awareness of environmental change and increase the capacity to respond proactively to these changes among stakeholders in FITCA participating countries.

Objectively verifiable indicators of this purpose include the number of local, regional and international workshops held and the number of exchange visits between projects in the region.

2. **Objectives** - The overall objective is to increase the sustainability of natural resources and agricultural systems, through environmental monitoring and management, in participating FITCA countries.

The twin objectives of increasing productivity to improve human welfare and to sustain those gains over the long term are at the core of the objectives of the agricultural sector in each country.

3. **Implemented work:** according to the working plan the detail of the implementation of the planned activities is described and given.

***i. Recruitment of the different permanent specialists***

Following ILRI's internal recruiting procedures the post of a scientist to be engaged had to be discussed, defined, advertised, interviewed what has led to a nearly 5 months process. A half-time regional ecologist was selected among 17 candidates (among them, three 3 were short listed and interviewed) he is currently under recruitment (Dr Joseph Maitima). The RAO and the Delegation were members of the panel. The candidate will start his duty with EMMC the 1<sup>st</sup> of November.

The GIS specialist position is under process. Internally, only two candidates applied for the position and one wasn't reaching the minimum requirement. An outside application was opened. The deadline for application is on October 26<sup>th</sup> EMMC will proceed to the screening of the candidates, establish the short list and proceed to the interview the first weeks of November.

After a wide consultation of the national institutions, as far as the project must help NAR's to strengthen the research capacity, it was decided to contract the secondment of the three community participation specialists (CPS's) with KETRI in Kenya, NARO in Uganda and EARO in Ethiopia. Negotiations are currently on going with the different institutions on the different terms of the contract. EMMC co-ordinator would bring out this last issue before the end of this year.

***ii. Complete a rapid assessment of the environmentally sensitive areas within the project areas and select representative sites for detailed environmental monitoring***

Some potential sites were selected with the Kenyan and Ugandan FITCA teams in the area of Engurai in Teso district in Kenya and on the opposite side of the valley in Uganda (Tororo district) The difference of land-use appears clearly on RSI scene (see RSI included in Annex A) and the tsetse densities are significantly different in the two neighbouring areas. Some other sites need to be located in the other part of the project area. This activity is planned for November. The visit to the field in Ethiopia is planned for December. A preparatory journey will be paid to Tanzania in November in order to define which will be the EMMC implication in the FITCA national and with which partner EMMC is going to work. The TOR of STC for developing baseline information were prepared, submitted to RAO and EU and was proposed to SEMG institutions in order to provide experts CV's and to proceed with the different activities conducted under these STC (STC will be presented on a following chapter)

**iii. *Integrate environmental monitoring and management into FITCA national programmes***

This activity is currently on going with the Ugandan team, EMMC is contributing with the development of the ‘environmental’ chapters of the baseline questionnaire launched by FITCA Uganda on an extensive and holistic survey covering the whole area of the project. From the last technical meeting (23<sup>rd</sup> of August) it was acted EMMC is going to support the different national component providing a STC on the harmonization of the database management. With the Kenya team, it is planned to share 6 months trainees from European’s Universities in order to carry on specific studies on the environmental direct impact of the impregnated net used to protect the Zero grazing Unit (ZGU). Another student will start some studies on land-use in Engurai district. The survey of the different policies developed and adopted by the States on environmental issues is not yet started. TOR of STC are ready on this topic.

**iv. *Identify local capacity, capability and data for environmental monitoring***

At the regional, national and local levels the database directory will be developed by the GIS specialist with support of the expert coming for the harmonization of the different databases. This monitoring will provide precise information on the institutional and individual capacity in the field of environmental management.

**v. *Obtain remotely-sensed imagery for all project areas, ground-truth images and create broad baseline databases to monitor environmental change (across FITCA control areas)***

FITCA-EMMC has exchanged with FITCA national on this specific issue. After these meetings, it appeared clearly there is an essential need for harmonization of tools and RSI. The different scales and degree of accuracy of the thematic maps are the key points of this activity. A comprehensive and well-structured imagery system, which could be used by the FITCA community as a whole or on a specific item, has to be made available. A cooperation scheme will be developed with RS imagery oriented organizations, in order to enhance local capacity in this field. A STC is prepared for beginning this high priority part of the programme. Outputs of this STC will be available before the end of the AO#1 period.

**vi. *Stakeholder consultations***

As the three CBS are not yet recruited or seconded, nothing was done on this activity. A general STC on community profile analysis within the FITCA Regional area will bring to every

FITCA members, baseline knowledge of the communities involved in the project. CBS will be closely associated with the expert committed for this consultancy.

**vii. *Creation of information exchange network***

1. FITCA-EMMC hasn't enough data and information to share at this present time
2. The EMMC Website isn't yet available.

**viii. *Development and dissemination of public awareness materials***

FITCA-EMMC hasn't enough data and information to share at this present time

**ix. *Report outputs of project activities to policy makers through OAU/IBAR***

The FITCA-EMMC is currently involved on the preparation, with the OAU/IBAR and UNEP teams a concept note on 'Livestock and environment', which will be the support of a world conference on environment which will be held in South Africa in 2002.

**B. Major Achievements during the reporting period**

The main achievements of this period were:

- To develop within ILRI the proper procedures able to fit with the project requirements and with ILRI's management rules. The aggregation of the project budget line inside the PLE annual budget was source of confusion as far as the period of execution of the AO#1 (1<sup>st</sup> of April up to 31<sup>st</sup> of March) isn't fitting with the accounting year (1<sup>st</sup> of January up to 31<sup>st</sup> of December)
- To meet the different national research organizations which will be our counterparts at the national level. The secondment of the CBS is our main concern.
- To identify the future sites where FITCA-EMMC is going to carry out its research within the communities.
- To prepare the TOR for the STC.
- To keep informed the different partners on the stage of development of the present AO.



## C. Outputs

- **Back to office reports (Annex B)**
  - ❖ 17-24<sup>th</sup> June 2001 Western Kenya & Uganda
  - ❖ 25<sup>th</sup> September-5<sup>th</sup> October 2001 Ethiopia
- **Meeting reports (Annex C)**
  - ❖ Coordination meeting with FITCA Uganda 13-15/01/2001
  - ❖ C2I-ILRI strategic alliance meeting 19-20/04/2001
  - ❖ Meeting with KETRI 30/05/2001
  - ❖ FITCA regional 16<sup>th</sup> Ministerial meeting 4-7/07/2001
  - ❖ FITCA regional technical coordination meeting 23/08/2001
- **Term of reference for the short term consultancies (Annex D)**

A set of seven TOR for STC is drawn and EMMC is currently planning the time schedule these STC (chart in annex E)

  - ❖ Agro-ecological and agro-pastoral baseline survey in the FITCA Regional area
  - ❖ Community profile analysis in the FITCA Regional area
  - ❖ Regional and National FITCA database harmonization
  - ❖ Assessment of disease risk and tsetse challenge
  - ❖ Historical approach of tsetse control policy in the FITCA Regional area
  - ❖ Community based training in safe handling, use and disposal of insecticides
  - ❖ Landscape and land use analysis using satellite imagery at the FITCA regional and National level
- **PowerPoint presentations**

8 slideshows were developed to present FITCA-EMMC to different publics. They should be the frames of the future EMMC Website
- **International Conference communication**
  - ❖ BOURZAT (D.), REID (R.) 2001 – FITCA and environment. Ouagadougou, 26<sup>th</sup> ISCTRC Conference 1-5/10/2001

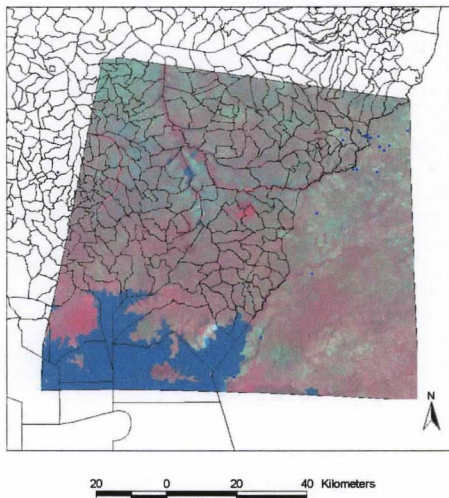
## I. Budget

Brief discussion indicating that project is on target in terms of budget. If this is not the case, indicate over or under expenditure and justification. Include copy of detailed budgetary expenditures.

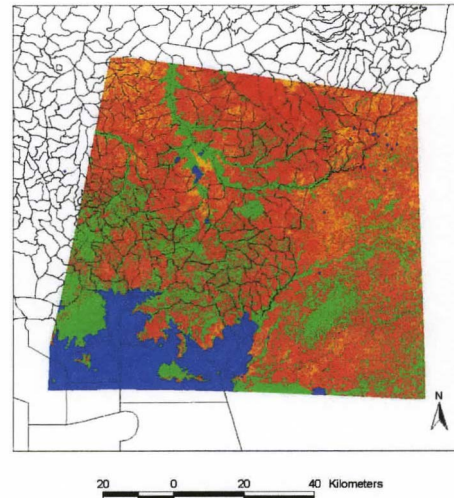
## J. Conclusion

## **ANNEX**

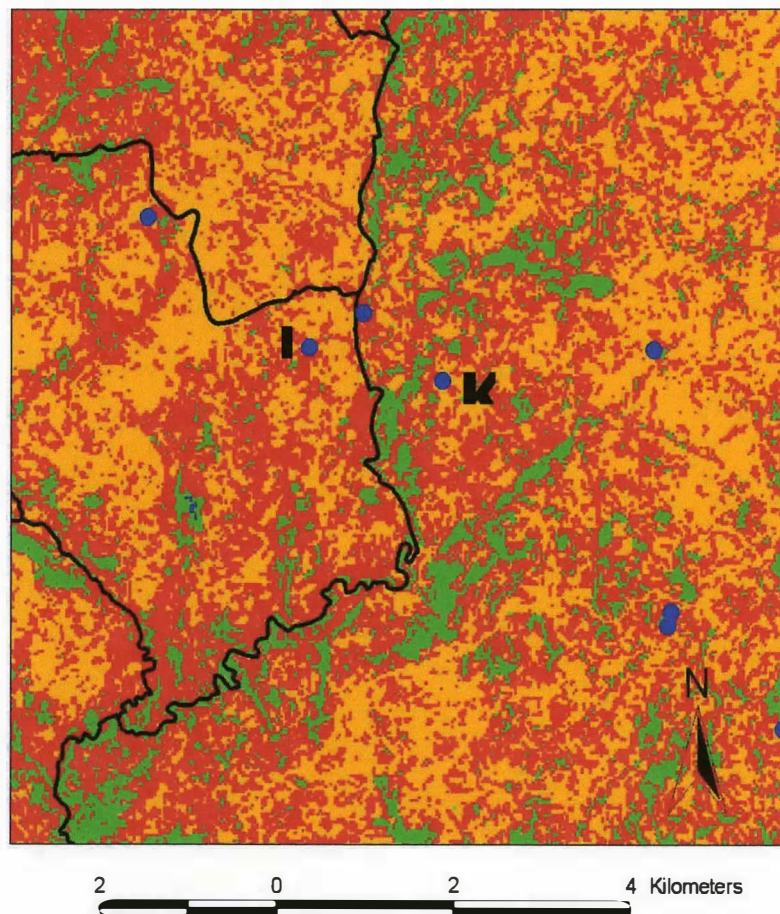
## Annex A



**RSI Initial scene Angurai Area**



**RSI Angurai Area (blue dots=GPS position)**



**RSI GPS dot K is in Angurai (Kenya) dot I is in Tororo (Uganda) The green areas are bush land areas**



## Annex B

# BTOR



# EMMC

**From :** Daniel BOURZAT & Robin REID

**Date :** June 29, 2001

**Re :** 17-24<sup>th</sup> June 2001 Western Kenya & Uganda

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### *Persons attending the mission*

Dr Robin REID, Head of ILRI-LPE

Dr Daniel BOURZAT, coordinator of FITCA-EMMC

Dr Stéphane de la ROCQUE, CIRAD GIS specialist

Dr K. Heinz POLITZAR, FITCA regional coordinator joined the mission from 17<sup>th</sup> up to 21<sup>st</sup>

### *Objectives of the mission*

- To meet with NARS and local civil services in the project area.
- To check places where EMMC could start monitoring activities.
- Field trip in order to get an overall of the different landscapes in the FITCA areas.
- To identify students and NARS' researcher who could be seconded to the EMMC.

### *Western Kenya*

#### ➤ *Persons met*

- **FITCA-Kenya:** Mr Francis OLOO
- **KETRI:** Dr Georges MATETE, Miss Julia KANUGA, Dr Joseph MAKUMI, Dr Sospeter O. NYAMWARO.

➤ *Field trip & particularities of FITCA area*

Specific locations were GPS recorded in order to start GIS and mapping activities. The project area is from 1300 m up to 1600 m along the Ugandan border. In the Angarai division of Teso district the burden of flies is very high reaching over 1000 flies/trap/day. The area is characterized by a patchwork of fields (Maize, Tobacco, Cassava, Beans...) and fallows, bush and forest areas. The size of the fields, hand cultivated is quite small and discontinuity between flies' habitat seems to be too low to control the flies' migration. We went along a transect from Busia to Port Victoria, the average altitude is lower than in Teso, the area seems to be more cultivated and the fields' size seems to be wider. This area was former cotton cash crop oriented. The rainfall's gradient of the eastern part of Victoria Lake is decreasing from Busia (1200-1400 mm) to port Victoria (600-800 mm). The opposite is observed on the Ugandan side of the Western shore. FITCA Kenya is going to start an intensive campaign to reduce drastically flies density in Angarai division.

➤ *Contribution to field activities*

As far as we saw from this rapid trip, FITCA-EMMC could be implicated through ILRI and SEMG in close collaboration with FITCA-Kenya and KETRI in data management and GIS capacity building. As different eco-zones are involved, some complementary works on flies' habitat should be conducted using satellite imagery with a specific emphasis on the riverine gallery evolution. If some archive's scene could be found, a temporal comparison with an updated set of scenes could provide a very accurate knowledge of 'nagana', sleeping sickness and flies kinetics

➤ *Cooperation requested*

According our proposal to work on the Angurai division of Teso district (using the opposite site in Uganda as non-infested site) where FITCA Kenya has planned to start an intensive control of flies (mainly *pallidipes*) using screens and traps, we will appreciate FITCA Kenya will share its census and transects databases in order to avoid duplication. As some hypotheses are dealing strongly with socio-economics and rural policy, the socio-anthropologist of KETRI will have a key contribution to our community's studies.

## *Uganda*

➤ *Persons met*

- **FITCA-Uganda:** Dr Simon GOULD, Dr C. LAKER, Dr A.GIDUDU
- **LIRI:** Dr W. OLAHO-MUKANI, Dr , Mr Eric FEVRE, Dr J.OKOTH
- **NARO:** Dr John R.W. ALUMA
- **COCTU:** Dr OGWAL

○ **University of Makerere: Pr E.N. SABIITI**

➤ *Field trip & particularities of FITCA area*

The Ugandan project area is hugely more important than on the Kenyan one. According to our rapid trip, land-use is more intensive cultivation oriented in Uganda than in Kenya. The flood areas on Victoria Lake's shore are devoted to intensive rice productions.

As human health is one of the main component of this project, cattle have to be considered as potential vectors for the sleeping sickness. Serological investigations and fly species associated with could provide major data in this field.

➤ *Contribution to field activities*

- baseline data will be collected along with the community and household surveys that are about to begin.
- Regional typology of landscape will be prepared using Landsat scenes. An historical analysis will be conducted if archive's scenes are available.
- In 3.5 years, these surveys will be repeated to assess impacts.

➤ *Cooperation requested*

A community participation specialist will be recruited to be part of the national teams. As discussed with the Dean of Makerere Agricultural college and with the DDG of NARO, he or she will likely be recruited under the NARO or Makerere University umbrella. Global Cost of this specialist will not exceed \$ 6,000/year.

➤ *PhD Student*

A PhD student in ecology could be recruited to conduct specific surveys. Some candidates are available from Mekerere University. A proposal will be prepared and should be discussed with the project team early September. Global Cost of this PhD student will not exceed \$ 4,000/year.

### ***Landscape analysis and land-use changes***

According to the different scales the landscape changes have to be considered, we suggest using two different level of analysis

➤ *Regional scale analysis of land-cover change*

- Current Landsat TM imagery will be acquired to cover the FITCA project areas (Kenya, Uganda and Ethiopia).
- Land cover (broad vegetation types, cropland, grazing land) will be interpreted and analyzed on these images.